

PARCEL 1 [AK-WA SHIP BUILDING]

AK-WA SHIPBUILDING (1986 to present; E)

1991 -- CU, PB, ZN (200 - 1800 ppm) and HG detected in catch basins; only low concentrations found in outfall discharges

Facility has NPDES permit with limits for CU, ZN, OIL, GREASE, and TSS -- which have been exceeded (frequency of exceedance N/A)

March 1993 -- 10 to 15 tons of sediment grit containing PB, ZN, CU, PCBs pumped from catch basins and disposed offsite

ZIDELL DISMANTLING CORP (1960 -1983; E)

Ship salvage operations generating SCRAP METAL and used PETROLEUM PRODUCTS.

Also scrapped TRANSFORMERS; no documentation if PCBs involved.

Also generated ASBESTOS wastes.

Primary pathway--released WASTE OIL to waterway (DIRECT DISCHARGE); had NPDES permits to discharge treated ship dismantling wastes, but 7 OIL SPILLS or other PERMIT VIOLATIONS documented between 1969 and 1975.

SURFACE WATER RUNOFF from shoreline is a secondary release pathway.

U.S. NAVY (1939 - 1945; E) and TODD SHIPYARD (C)

Navy supervised Todd Shipyard shipbuilding activities.

Discharges from shipbuilding activities typically include STORMWATER RUNOFF, GRIT BLASTING, and WASTEWATER DISCHARGES containing METALS, PAINTS, SOLVENTS, WASTE OIL and SANDBLAST GRIT.

SUMMARY

Pathways: Direct discharge, surface water runoff

Potential Contaminants of Concern: Metals, PAHs, other SVOCs, TPH, TBT, PCBs



PARCEL 2 [OCCIDENTAL CHEMICAL]

OCCIDENTAL CHEMICAL COMPANY (1929 to present; E)

Operates chlor-alkali, ammonia, muriatic acid, and calcium chloride plants abutting waterway.

Operated PCE plant from mid-50s to mid-70s; resulted in contaminated groundwater.

Discharges wastewater from chlor-alkali plant via NPDES permitted outfall; appears permit went into effect in 1988; DIRECT DISCHARGE of wastewater apparently occurred before 1988, discharging PB and CHLORINATED ORGANIC COMPOUNDS to waterway.

Primary pathways -- WASTEWATER OUTFALL and GROUNDWATER SEEPS from bank.

1981 -- Ecology documented high levels of PB (6100 mg/kg), SB, CU, CR, CD, NI, ZN, PAHS, PCE, TCE and HEXACHLOROBENZENE in sediments near outfall

1984 -- Ecology documented PCE, PAHS, and PESTICIDES in groundwater seeps from waterway banks.

RCRA corrective action currently addressing cleanup at the site.

SUMMARY

Pathways: Direct discharge, groundwater seeps

Potential Chemicals of Concern: Metals, PAHs, PCE, TCE, other VOCs, and pesticides

PARCEL 3 [PRI NORTHWEST]

PRI NORTHWEST, INC. (1979 - 1984; E)

Operated fuel storage and distribution facility; property currently vacant.

Products included diesel, leaded and unleaded gasoline, naptha, and alcohol.

1987 -- City of Tacoma document floating petroleum product on groundwater table

1990 -- subsurface soils contained PB (141 ppm); surface soils contained PCBs (24.3 ppm); groundwater contained TCE, PCE, DCE, AS, CU, CR, PB, and ZN

1992 -- sludgy bank fill material contained PB (37, 400 ppm); seep water contained TCE, PCE, CU and ZN

FLETCHER OIL CO. (1930 - 1978; E)

Stored PETROLEUM PRODUCTS at tank farm; reportedly included both virgin and used petroleum products.

UNITED INDEPENDENT OIL (C)

Information not yet available.

SUMMARY

Pathways: groundwater seeps, erosion of bank fill material(?)

Potential Contaminants of Concern: PAHs, TPH, PB, PCBs, PCE, DCE, Metals

PARCEL 4 [MCMILLAN PIPER]

LINDEN TRUCKING (E)

Information not presented in Problem Area Status Report.

McCHORD AIR FORCE BASE (1951 - 1965; identified as E, but info contained in C)

PETROLEUM PRODUCTS tank farm.

Apparently there is SEEPAGE (GROUNDWATER) below outfall structure; along bank during rain event.

Outfall and runoff apparently sampled; results violated water quality standards.

Problem chemicals included CU, PB, ZN.

U.S. NAVAL & MARINE CORPS RESERVES (Unknown to present; E)

Facilities included a naval shipyard, petroleum storage tanks, and reserve center.

Releases of TETRAETHYL LEAD and PETROLEUM PRODUCTS documented from storage tanks; soil in storage tank area contaminated with PB, PCBS, HALOGENATED VOAS, and ETHYLBENZENE; pathways from tank area include GROUNDWATER RELEASE to waterway.

Reserve center released PAINT, PETROLEUM PRODUCTS, CLEANING SOLVENTS, DEGREASERS, DETERGENTS, and ACID CLEANING WASTES.

CMX TRUCKING (C)

Tank farm at site reportedly removed by the Port in 1983 and site paved; no clean up prior to paving.

SUMMARY

Pathways: Direct discharge via outfall(?), groundwater seeps

Potential Contaminants of Concern: TPH, PAHS, other SVOCs, VOCS, PCBS, Metals(?)

PARCEL 5 [U.S. GOVT. NAVAL & MARINE RESERVE]

No evidence of releases of problem chemicals or pathways to waterway, according to Problem Area Status Report.

PARCEL 6 [CITY OF TACOMA]

CITY OF TACOMA (Unknown to present; E)

City of Tacoma owns storm drains with outfalls at mouth of waterway.

Ecology deleted drains from Milestone 1 mouth of Hylebos source list in 1992, given that city cleans sediment from catch basins periodically.

PORT OF TACOMA (1123 Taylor Way, Parcel 8a, E)

Identified as owner of this piece of property adjacent to an upgradient of City of Tacoma property along waterway; no information available in Problem Area Status Report.

SUMMARY

Not enough info to evaluate the significance of the seeps noted on the map.

impossible here? - 2 pups

PARCEL 7 [TAYLOR WAY PROPERTIES]

TAYLOR WAY PROPERTIES (1986 to present; E)

Considered two separate parcels: Parcel A, upland of the waterway, which was sold to McMillan Piper in 1988 and for which they plan to develop a container freighter terminal; and Parcel B, abutting the waterway, which has been leased to Chemical Processors Inc. since 1988.

Property has long history of industrial operations, including: PULP and PAPER production from 1920s to 1940s (see ITT RAYONIER); POWDERED METAL manufacturing in 1950s; WASTE OIL, PAINT and SOLVENT STORAGE; COPPER SLAG GRIT blasting; GLUE and ADHESIVE manufacturing; WOOD PRODUCTS manufacturing (see BRAZIER).

1985 -- white METAL-containing fluid observed overflowing vats into on-site pond and subsequent ditch draining to waterway; unidentified SLAG also observed

1986 -- PAHs (10,000 ppm), PCBS (< 10 ppm), and high levels of CR, PB and ZN detected in sludge excavated from upland ditch and sumps

1991 -- Ecology detected PCBs (1200 to 2700 ppm), PB (820 to 990 ppm), and CU (3700 to 4300 ppm) in soils along waterfront

1992 -- AS (10 to 202 ppm), CD (1 to 44 ppm) and PCBs (0.05 to 86 ppm) detected in waterfront soils

Same chemicals detected in upland soils in Parcel A, but at lower concentrations, mostly below MTCA cleanup levels.

Release pathways include: DRAINAGE DITCH and SWALE on east side of property draining surface water runoff from upland portion to waterway; GROUNDWATER SEEPS discharging from banks; WATERFRONT SOILS in direct contact with waterway at high tide.

1985 -- Ecology detected CU, CR, PB, NI, and ZN (for all, 0.1 to 6.4 mg/L) in ditch surface runoff

1991 -- AS, CU and CR (for all, 3 to 32 ug/L) in waterfront groundwater; not analyzed for PAHs or PCBs.

Upland groundwater contained AS, CU, CR, and PB at concentrations below or slightly above MTCA cleanup levels.

BRAZIER FOREST INDUSTRIES INC. (1985 to 1986; E)

Log and forest product sales business which reportedly did not operate any business from April 1985 to April 1986.

JOHN BRAZIER (1974 to 1985; E)

President of Brazier Forest Industries, formerly Brazier Forest Products.

Files and database do not document whether Brazier Forest Products conducted business operations at property from 1974 to 1985.

ITT RAYONIER, INC. (1936 to 1942; E); SHAFFER PULP CO. (1928 to 1935; B-unable to locate); SHAFFER BOX CO. (1921 to 1928; B-unable to locate)

Shaffer Pulp Co. and Shaffer Box Co. are corporate predecessors to ITT Rayonier Inc.

From 1921 to 1942, these companies operated a wooden box/crate production plant and a sulfite pulp mill onsite.

During 1930s, Shaffer Pulp discharged process black liquor wastewater from an outfall to the waterway; chemicals released included LPAHs and HPAHs.

SIERRA SANDBLASTING (C)

No known sources at facility.

CHEMICAL PROCESSORS INC./BURLINGTON ENVIRONMENTAL (1988 to 1990; B)

Connection between parties tenancy and release of problem chemicals not documented in database.

SUMMARY

Pathways: surface water runoff via drainage ditch and swale; groundwater seeps along bank; possible leaching from bank soil

Potential Contaminants of Concern: Metals, PAHs, other SVOCs, PCBs

PARCEL 8 [NO NAME]

**** Note **** This parcel also contains the waterfront portion of the parcel immediately east (see Note for Parcel 9), according to the Problem Area Status Report

JOSEPH SIMON & SONS INC. (1975 to present; E)

Property currently vacant except for pier ruins and log ramp; leased to Rail & Locomotive Equipment Co. (owned by Joseph Simon & Sons) from 1981 to 1984 for dismantling and storing locomotives and track; site leased to Cascade Timber Co. as log sort yard from 1987 until recently.

Sources included: metal scraps stored near beach; scrap railroad locomotives; transformers; tracks; locomotive oil and fuel; batteries; an oil spill to soil.

Released included: AS, CU, PB, ZN, PCBS, PAHS.

Pathways included: DIRECT DISCHARGE from beach; STORM DRAIN HY-73; and SURFACE RUNOFF

1991 -- Ecology UBAT detected AS, CU, PB, and ZN in 300 to 600 ppb range; same metals in sediments from an upland swale in 1000 ppm range; same metals in upland soils in 10 to 200 ppm range, below MTCA cleanup standards.

CASCADE TIMBER CO. (1987 til recently; E)

Property partially paved.

WASTE OILS and METALS from other tenants' scrapyard and shipbuilding activities currently stored onsite.

RAIL & LOCOMOTIVE EQUIPMENT CO. (1981 to 1984; D)

Purchased railroad locomotives and track, dismantled and stored them on the property, and sold material as scrap metal.

SUMMARY

Pathways: Drainage swale, groundwater seeps, storm drain, direct discharge

Potential Chemicals of Concern: Metals, PCBs, PAHs, TPH

PARCEL 9 [INCORRECTLY IDENTIFIED AS CENEX FEED PLANT]

**** Note **** This parcel, according to the Problem Area Status Report, is entirely upland (see Note for Parcel 8)

NORDLUND BOAT CO. (1976 to present; E)

Operated a fiberglass boat building facility; construction materials contain XYLENES, ACETONE and OTHER ORGANICS.

(b) (6) (1974 to 1979?; E)

Property owners; transferred property to (b) (6) et al. at an unspecified date.

(b) (6) ET AL. (1979? to present; C)

No information in Problem Area Status Report.

SUMMARY

Pathways: unknown

Potential Chemicals of Concern: Organic compounds

PARCEL 10 [NO NAME; SHOULD HAVE BEEN CENEX FEED PLANT (I.E., CENEX AGRICULTURE INC.)]

CENEX AGRICULTURE INC. (1982 to present; D)

Cenex reportedly successor of Western Food Association, which operated facility from 1946 to 1982; corporate status between the two companies not documented.

Cenex manufactured animal feed here from 1982 to 1987; Land O' Lakes took over feed manufacturing from 1987 to 1990; since early 1980s a portion of the property has been leased to seafood processing business and truck maintenance and repair operations.

Property paved and storm drain system installed in 1983; system includes three outfalls to the waterway.

Stormwater runoff, boiler blowdown, and oil/water separator effluent are connected to storm sewer system

BOILER BLOWDOWN and CONTACT COOLING WATER containing CU, PB, and ZN discharged to storm drain; unknown if all property occupants used boiler

Effluent from oil/water separator containing PAHS and ZN reportedly discharged to storm sewer from 1951 to 1986; all storm drains on property discharged directly to waterway.

RYDER TRUCK RENTAL INC. (1987 to 1991; E)

Operated truck rental, washing, sales, maintenance, repair, and storage business.

Releases include: spills of waste oils containing PAHS drained into on-site catch basins; effluent from an oil/water separator discharged from truck repair shop building to storm sewer and subsequently the waterway.

1988 -- sludge in oil/water separator contaminated with PAHs, ZN, CR, CU, and PB

1991 -- 7 underground waste oil and fuel oil tanks removed from property

1992 -- soils contaminated with PAHs and TPH voluntarily remediated

City of Tacoma Sewer Utility directed Ryder to connect the OWS to the Tacoma sanitary sewer system, but no documentation exists that this was done; Tacoma sewer inspector reported in 1991 that Ryder was still using the old OWS

BUFFELEN WOODWORKING CO (Unknown to 1946; E)

Identified in Problem Area Status Report as associated with this parcel, but information re: its contribution to contamination not included in report.

MILES TRUCKING (Unknown to present; C)

Suspected releases of DIESEL FUEL, NI, ZN, CD, CR, PB to waterway via storm water drains.

SUMMARY

Pathways: Direct discharge, storm drains

Potential Chemicals of Concern: Metals, PAHs, TPH

PARCEL 11 [BUFFELEN WOODWORKING]

BUFFELEN WOODWORKING CO. (1910 to present; E)

Buffelen or its predecessors have manufactured wooden doors and furniture and plywood at facility since 1910.

Historic sources include: WASTEWATER DISCHARGE; PCP SPILLS to site soils; METAL SHAVINGS; sawdust; other PROCESS WASTES.

Historic direct discharge of glue washing, dryer condensate, and depitching process wastewater via an outfall (which until recently was NPDES permitted; this wastewater now directed to Tacoma Sewer System) occurred.

Historically, wood & metal shavings swept onto site soils or directly into waterway; chems detected in this debris included AS, CU, PB, HG, NI and ZN.

Spills of PCP and other PRESERVATIVES have occurred from the PCP treatment tanks and areas to soils; chems detected in soils included CR, PCP, FORMALDEHYDE, PCBS; FORMALDEHYDE and PCP also detected in groundwater.

Pathways include: surface water runoff via Lincoln Ave. Ditch and sheet flow; groundwater seepage.

BOARDMAN W. BROWN (Unknown to present; E)

Owens 1 of 5 parcels on which the Buffelen Woodworking Plant is located.

MARY JANE B. ANDERSON (Unknown to present; E)

Owens 1 of 5 parcels on which the Buffelen Woodworking Plant is located.

SUMMARY

Pathways: Direct discharge, surface water runoff (ditch and overland flow), groundwater seeps

Potential Chemicals of Concern: Metals, PCP, PCBs, formaldehyde

PARCEL 12 [MURRAY PACIFIC CORP]

**** Note **** Property divided into: 3502 Lincoln Ave. (Murray Pacific Corp. Log Sort Yard No. 1), which is major portion of property; and 3542 Lincoln Ave., 12-acre parcel in northwest corner.

MURRAY PACIFIC CORP-LOG SORT YARD (1967 to present; E)

Operated log sort yard until 1985; property used for log chipping from 1985 to 1991; currently vacant.

29,000 tons of ASARCO SLAG or SANDBLAST GRIT deposited for ballasting muddy soils between 1975 and 1981; resulted in releases to soil (via vehicular traffic and wood waste leachate) of AS, CU, PB, NI and ZN; releases to waterway occurred via SURFACE WATER RUNOFF and GROUNDWATER SEEPAGE.

Murray Pacific and ASARCO currently conducting RI/FS at property in compliance with 1992 Ecology MTCA cleanup order.

SEAPORT BARK SUPPLY INC.-12 ACRE PARCEL (1985 to 1988; E)

Reclaimed beauty bark by separating it from mixtures of bark, wood waste, dirt, rock, and slag through mechanical screening and floatation in on-site settling ponds; most wastes obtained from log yards ballasted with ASARCO SLAG, therefore contained AS, CU, and PB.

Wastewater from settling pond discharged to waterway via a ditch prior to 1986; this discharge was not NPDES permitted; AS, PB and ZN were detected in discharge; TPCHD order discharge closed in 1986.

After 1986, occasional overflow from ponds and surface water runoff from log yard wood waste piles released ASARCO slag chemicals to a Lincoln Ave. storm drain, which discharged to the waterway at TPCHD outfall No. 65.

SUMMARY

Pathways: Direct discharge, surface water runoff, groundwater seeps

Potential Chemicals of Concern: Metals associated with ASARCO slag

PARCEL 13 [NO NAME]

USG INTERIORS INC. (AKA US GYPSUM; 1959 to present; E)

Produces rock wool for insulation from smelter slag, basalt and oil; prior to 1959, another rock wool manufacturer operated on the property.

ASARCO SLAG used in production prior to 1973; SEATTLE STEEL SLAG used since then; residued ASARCO slag scraped up from site in 1973.

Samples of rock wool, shot, groundwater and soil contained elevated levels of CR, AS, and PB; detected to lesser degree in storm drain samples.

DIRECT DUMPING of wastes into Hylebos Creek and Puyallup River reportedly occurred; wastes were reportedly cleaned up.

US Gypsum had NPDES permit for discharge to waterway in 1980s.

GROUNDWATER DISCHARGE primary pathway of concern; SURFACE WATER RUNOFF secondary pathway of concern.

Soil contamination is likely source of groundwater contamination.

1992 - Ecology detected AS (<200 ppm; MTCA cleanup standard) and CR (up to 1190 ppm) in soils.

Murray Pacific Corp. purchased a portion of the site in 1992; has offered voluntary chromium RI work; some slag stated to exist on the site as railroad line ballast.

MURRAY PACIFIC CORP. (1992 to present; E)

Wastes from US Gypsum operations and ASARCO slag used as fill remain in soils.

GROUNDWATER SEEPS and SURFACE WATER RUNOFF have released AS, CU, ZN, NI CR, PB, and SB from soils to waterway.

EDMAN CO. (Unknown to 1992; C)

Insulation manufacturing plant??

SUMMARY

Pathways: Direct discharge, groundwater seeps, surface water runoff

Potential Contaminants of Concern: Metals associated with ASARCO slag

PARCEL 14 [ELF ATOCHEM]

Elf Atochem (1927 to present;E)

Operated chemical plant abutting waterway since 1928; currently produces CHLORINE, SODIUM HYDROXIDE, HYDROCHLORIC ACID, and SODIUM CHLORATE; produces SODIUM ARSENITE HERBICIDE ("PENNITE") between 1940 and 1972.

ON-SITE "PENNITE" LAGOON received arsenic-containing sludge and condensate containing CHLORINATED ORGANIC COMPOUNDS (e.g., PCE and HCBP).

METALS (e.g. CU) associated with cooling waters were discharged through NPDES-permitted outfall.

SPILLS to soil of SODIUM DICHROMATE released CR.

GROUNDWATER SEEPS primary pathway; transported AS, PCE and HCBP to banks and waterway sediment; company has recently implemented consent agreement to mitigate groundwater seepage from PENNITE LAGOON.

SURFACE WATER RUNOFF secondary pathway; from PENNITE LAGOON and on-site soils to waterway via EAST CHANNEL DITCH.

DIRECT DISCHARGE of PROCESS AND COOLING WASTEWATER tertiary pathway; outfall unpermitted during early decades of facility operation.

SUMMARY

Pathways: Groundwater seeps, surface water runoff via overland flow and ditch, direct discharge

Potential Chemicals of Concern: Metals (AS & CR), PCE, HCBP

PARCEL 15 [NO NAME]

**** Note **** Parcel located upland of waterway, but connected to Hylebos via East Channel Ditch

PETROLEUM SERVICES INC. (1978 to present;E)

Operates petroleum waste products transportation and reprocessing facility.

Wastewater presently discharged to Tacoma sanitary sewer system and sludge disposed at offsite haz waste landfill.

SPILLS of WASTE OIL to on-site soils and VIOLATIONS of Tacoma sewer system industrial user DISCHARGE PERMIT CONDITIONS occurred in early 1980s.

1988 - EPA contractors detected CU, NI, PB, and PAHS (100 to 20,000 ppb) in East Channel Ditch sediment; soils near ditch contained PROBLEM CHEMICAL METALS, PAHS, and PCBS (2000 to 7000 ppb); ditch surface water contained ZN, PHENOL and 4-METHYLPHENOL.

ANNON MAY AND WENDELL SMITH (Unknown to 1987;E)

Annon May former co-owner; currently serves as agent for the estate of former owner of Petroleum Services (Wendel Smith).

SUMMARY

Pathways: Overland flow/surface water runoff to waterway via East Channel Ditch, direct discharge permit violations

Potential Chemicals of Concern: TPH, PAHs, Metals, PCBs, Organics

PARCEL 16 [3009 TAYLOR WAY SITE]

ELF ATOCHEM (1957 to present; E)

Owner of the log yard; all lessees ran log yarding, debarking, or related operations.

Property vacant since 1986; all wood waste and slag deposits capped in 1992 per 1987 consent decree.

ECHO LUMBER (1984-1986; E)

Used property as log sorting, debarking and chipping yard.

Claimed they did not transport ASARCO slag to site for ballast; recent consent decree indicated ASARCO slag was transported to the site during the time period under which Echo operated.

Large quantity of bark generated from debarking activities mixed in with site soils.

1983 & 1984 - Norton and Johnson/Ecology detected AS, CU, PB, and ZN in SURFACE RUNOFF from site.

1987 - RI detected 4-METHYLPHENOL, PHENOL, SB, AS, CU, PB and ZN in SURFACE WATER RUNOFF and SEEPS leading from site to KAISER DITCH, EAST CHANNEL DITCH and WATERWAY; PROBLEM CHEMICALS also detected in site SOILS and GROUNDWATER.

DUNLAP TOWING (1979 to 1983; E)

Operated log sort yard; purchased approximately 1000 tons of ASARCO slag during operations.

PORTAC INC. (1977 to 1983; E)

Operated log sort yard.

JOHNSON-BYERS INC. (1967 to 1977; E)

Operated log sort yard.

BALFOUR GUTHRIE (1964 to 1966; C)

Operated log sort yard.

SUMMARY

Pathways: Surface water runoff/overland flow/seeps to Kaiser Ditch and East Channel Ditch
Potential Chemicals of Concern: Metals associated with ASARCO slag, phenols

PARCEL 17 [WEYERHAEUSER LUMBER CO.]

WEYERHAEUSER CO. (1970 to present; E)

~~ASARCO SLAG~~ used as ballast; site paved with asphalt in early 1970s.

Known sources: FUELS, LUBRICATING OILS & GREASES, HYDRAULIC OILS, NATURALLY-OCCURRING CHEMICALS in raw logs, spent SANDBLAST GRIT, METALS associated with metallic equipment and buildings. Sandblast grit observed near Kaiser Ditch in 1990; not there in 1992; Weyerhaeuser claims sandblasting did not occur on property.

Problem chemicals in waterway sediments attributable to site: CU, NI, ZN, PHENOLS, PCBS, HPAHS; primary problem at site appears to be from PETROLEUM PRODUCTS and WASTE OILS.

SURFACE WATER RUNOFF via KAISER DITCH, DIRECT DISCHARGE from southeast corner of property (reportedly discontinued), and GROUNDWATER SEEPS to KAISER DITCH and WATERWAY are primary pathways.

WASHWATER containing petroleum products DISCHARGED TO GROUND prior to 1986.

KAISER ALUMINUM & CHEMICAL CORP. (Unknown to 1970; E)

Former owner; no releases associated with ownership documented.

DUPONT CHEMICAL (1944 to 1946; C)

Operated explosives plant; no known sources at facility.

SUMMARY

Pathways: Surface water runoff via Kaiser Ditch, groundwater seeps, direct discharge

Potential Chemicals of Concern: Metals associated with ASARCO slag (and sandblast grit?), PAHs, TPH, phenols, PCBs

PARCEL 18 [GLACIER SAND & GRAVEL CO.]

LONESTAR NW/INDUSTRIES (1987 to present; E)

Operates concrete batching facility.

Historical problems with high pH discharges violating NPDES permit limits, but no known problem chemical releases documented.

KAISER ALUMINUM & CHEMICAL (Unknown to 1970; E)

Owned gravel pit and cement production plant.

Minor diesel fuel spills reported, but no known problem chemical releases documented.

SUMMARY

Appears not to be site of concern.

PARCEL 19 [LOUISIANA-PACIFIC]

LOUISIANA-PACIFIC (1974 to present; E)

Operated saw mill or log sort yard.

ASARCO SLAG (approx. 5000 cubic yards) used as on-site ballast intermittently from 1974 to 1978.

Releases of AS, CU, PB, and ZN to waterway via SURFACE DRAINAGE DITCHES.

Ecology issued enforcement order requiring implementation of cleanup plan; City of Tacoma issues shoreline permit for cleanup; cleanup will include capping site, constructing outfall diffuser, planting wetland buffers.

PORT OF TACOMA (1959 to 1967; E)

Owner; couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

SUMMARY

Pathways: Surface water runoff via drainage ditches

Potential Chemicals of Concern: Metals associated with ASARCO slag.

PARCEL 20 [PORT OF TACOMA]

PORT OF TACOMA (Unknown to present; E)

Owner; property is Wasser-Winters log sort yard; located on Tacoma tideflats at junction of Hylebos Creek and Hylebos Waterway.

ASARCO SLAG used as ballast; released AS, CU, PB, NI and ZN to HYLEBOS CREEK via STORM DRAINS and SURFACE RUNOFF.

LOUISIANA PACIFIC (1986; E)

Tenant.

WASSER & WINTERS CO. (1972 to 1984; E)

Operated log sorting yard abutting head of waterway.

SURFACE WATER RUNOFF drains to waterway via HYLEBOS CREEK, DITCH on east side of property, and DRAIN PIPES on west side of property.

ASARCO SLAG used as stabilizer and ground into soil from 1977 to 1980; LEACHATE acidified by wood waste released AS, CU, PB and ZN.

1985 and 1987 - AS, CU, PB, ZN and lesser concentrations of CR, SB and CD detected in SURFACE WATER RUNOFF; PROBLEM CHEMICAL METALS also detected in WATERWAY SEDIMENT and shallow aquifer GROUNDWATER.

Company signed agreed order with Ecology to perform RI/FS in 1991; consent decree for MTCA remediation currently being negotiated.

SUMMARY

Pathways: Surface water runoff/leachate via Hylebos Creek, drainage ditches and pipes

Potential Chemicals of Concern: Metals associated with ASARCO slag

PARCEL 21 [REPUBLIC SUPPLY AND UNNAMED PARCEL TO SOUTH]

NORDLUND PROPERTIES (1979 to present; E)

Owner of property abutting waterway.

NORDLUND BOAT CO. (1979 to present; E)

Operates fiberglass boat construction business; includes pressure-washing boats.

Construction materials contain XYLENE and OTHER ORGANICS.

WASHWATER and STORM WATER RUNOFF drain to SETTLING POND which discharges to waterway.

PORT OF TACOMA (Unknown; E)

Owner; couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

PEDERSON OIL (1980 to 1986; ~D)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

APUTCO, INC. (1983 to present; C)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

SUMMARY

Pathways: Surface water runoff via settling pond

Potential Chemicals of Concern: Organics associated with fiberglass activities, TBT?? (from bottom washing?)

PARCEL 22 [STREICH BROTHERS INC.]

STREICH BROTHERS (1966 to present; E)

Operates machine repair and structural steel fabrication facility; operation uses LUBRICATING FLUIDS, PAINTS, ADHESIVES, SOLVENTS, and PETROLEUM FUELS; reportedly also uses CU, PB, NI, ZN, and TCE.

Discharges wastewater from oil/water separator to Tacoma sanitary sewer system.

SURFACE WATER RUNOFF from paved site drains through CATCH BASINS to a STORM SEWER that discharges to WATERWAY from OUTFALL at edge of property.

OILY SHEENS documented near outfall.

SUMMARY

Pathways: Surface water runoff via storm sewer outfall

Potential Chemicals of Concern: Metals, PAHs, TPH, other SVOCs, VOCs.

PARCEL 23 [PUYALLUP TRIBE]

PORT OF TACOMA (1968 to 1992; E)

Owner until property transferred to Puyallup Tribe in 1992.

Problem chemicals reportedly released from site to waterway via TWO DRAINAGE DITCHES and GROUNDWATER SEEPS.

CU, ZN, AS, PB (50 to 500 ppm), PCBS (380 ppb), PAHs (100 to 25,000 ppb), PHENOL, and 4-METHYLPHENOL detected in SEDIMENT offshore of DITCH OUTFALLS; lower levels of PAHS and METALS detected in DITCH SEDIMENT; low levels of AS and CU detected in GROUNDWATER SEEPS.

MANKE LUMBER (1974 to 1976; E)

No information re: activities documented in database in Problem Area Status Report.

SUMMARY

Pathways: Surface water runoff via drainage ditches, groundwater seeps

Potential Chemicals of Concern: Metals, PCBs, PAHs, phenols

PARCEL 24 [JONES-GOODELL SHIPBUILDING MARINE SUPPLY]

JONES-GOODELL CORP (1976 to present; E)

Operates shipbuilding business manufacturing fiberglass, wooden and metal yachts.

Wastes generated at site include LACQUER THINNER, TOLUENE, ACETONE, and PAINT; SANDBLAST GRIT used as fill behind bulkhead; now mixed with tidal sediment.

1992 - Ecology detected high levels of CU as well as detectable concentrations of AS, NI and ZN in MIXTURE of SANDBLAST GRIT and TIDAL SEDIMENT; observed stormwater runoff activities have released problem chemical from behind bulkhead to tidal areas.

SANDBLAST GRIT reportedly excavated from behind bulkhead line in 1992.

J & G INVESTMENTS (1976 to present; E)

Owner of property leased to Jones-Goodell Corp.

PORT OF TACOMA (Unknown to 1968; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

JONES-GOODELL SHIPBUILDING CORP (1968 to 1976; D)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

SUMMARY

Pathways: Stormwater runoff/erosion of sandblast grit to intertidal areas

Potential Chemicals of Concern: Metals associated with sandblast grit, organics associated with solvents and paints.

PARCEL 25 [MANKE LUMBER CO.]

MANKE LUMBER CO. (1976 to present; E)

Operates an office, paved storage area, pellet mill, truck and heavy equipment repair facilities, and sawmill with waterfront log boom float on several contiguous parcels on Marine View Drive; leases 2 acres to tallow storage facility; owns approx. 87 acres on north side of waterway near head; property extends across MV Drive; 59 acres undeveloped; remaining 28 acres are on or near waterway; office and paved storage area are located on waterfront; PCP DRIP TANK and two PETROLEUM LUSTs remediated at waterfront property.

1991 - property inspection indicated low levels of PHENOLS and PAHS at MAIN OUTFALL to HEAD of waterway from STORM DRAIN 40.

CONTINUOUS OILY WASTE from process operations has been DISCHARGED to SOILS and MAIN STORM WATER OUTFALL.

1987 - oil/water separator malfunction and SPILLED OIL into waterway

1987 - 200 gallons of HYDRAULIC OIL SPILLED onto asphalt, but didn't reach waterway

1988 - 1.5 quarts PCP dripped from treated lumber.

SUMMARY

Pathways: Surface water runoff via storm drains/outfalls, direct discharge/spills

Potential Chemicals of Concern: TPH, PAHs, PCP

PARCEL 26 [TACOMA BOAT BUILDING CO.]

TACOMA BOAT BUILDING CO. (Unknown to present; E)

Operates boat building and repair facility.

Waste-producing operations include SANDBLASTING, PAINTING, and METAL CLEANING.

Documented releases to soils include: AS, CU, PB, ZN, WASTE OILS, MARINE PAINTS, and SOLVENTS (METHYL ETHYL KETONE, TCE and TCA).

Documented releases to waterway via outfalls, drainage ditch, and boat launching ramps include: AS, CU, PB and ZN.

1993 NPDES permit - required company to submit a plan to Ecology for removing contaminated sediment and grit from storm drains

Ecology issues administrative order to correct NPDES permit CU and ZN effluent limitations.

SUMMARY

Pathways: Direct discharge, surface runoff via outfalls and a drainage ditch

Potential Chemicals of Concern: Metals, PAHs, TPH, other volatile and semivolatile organics, TBT(?)

PARCEL 27 [GENERAL METALS]

GENERAL METALS INC. (1959 to present; E)

Operates scrap ferrous metals recovery business; includes stripping interiors from junk cars, crushing cars, shipping scrap metals, and scrapping engines and transformers.

Documented releases to unpaved soils include: METALS, WASTE OILS and PCBS.

Primary pathway of concern is SURFACE WATER RUNOFF via an on-site STORM DRAIN and OUTFALL to waterway.

1990 - sediment contaminated with AS, SB, CR, CU PB, NI, and ZN at 50 to 300 ppm range; PAHS (0.5 to 1.7 ppm); PCBs (1 to 2 ppm).

1991 - installed storm water pretreatment system and outfall diffuser allowing discharges to comply with NPDES permit limits.

ACCIDENTAL PLACEMENT of cars and other scrap metals in waterway.

TIDAL FLUSHING of ASARCO SLAG used to stabilize bank near facility dock.

Ongoing current activities include paving site, removing PCB-contaminated soils, implementing other source control activities per Ecology order.

LESLIE SUSSMAN/SRS PROPERTIES (1959 to 1992; E)

Owner.

SUMMARY

Pathways: Direct discharge, surface water runoff via storm drains/outfall

Potential Chemicals of Concern: Metals, PCBs, PAHs, TPH

PARCEL 28 ?????

PARCEL 29 [HYLEBOS BOAT HAVEN & JOHNSON ENGINEERING]

RON OLIN AND JUDY JOHNSON (1975 to present; E)

Own property currently occupied by the Hylebos Marina; operations include boat building and repair, boat motor repair, and boat and equipment storage.

PAINTS STRIPPED in gravel yard; PAINT SEEPS into ground or FLOWS OVERLAND into waterway; SOLVENTS, LACQUERS, ENAMELS, and EPOXIES used; tank leaking WASTE OIL on property.

SURFACE WATER drains to Marine View Drive DRAINAGE DITCHES as well as partly into waterway; GROUNDWATER also pathway of concern.

DON AND ALBA OLIN (1972 to 1975; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

NORMAN AND PHYLLIS NORDLUND (Late 1960s to 1982; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

JOHNSON ENGINES (Unknown; Unknown)

Problem Area Status Report mentioned company but had no info; status has not been determined.

SUMMARY

Pathways: Surface water runoff via drainage ditches and overland flow, groundwater discharge

Potential Chemicals of Concern: Metals and organics associated with paint and solvent wastes, PAHs, TPH, TBT(?)

PARCEL 30 [HYLEBOS MARINA]

RON & BRAD OLINE (1972 to present; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

MATHER AUCTIONEERS (Unknown to present; C)

Former waste disposal site; current auction site; wastes from process operations.

AUTO FLUFF extends along BANK for 25 or more feet; bank not protected and has ERODED; source existed since 1992.

Problem chemicals released include: CD, CU, PB, NI, ZN, and PCBS.

Pathways include SEEPS, LEACHING and TIDAL ACTION.

SUMMARY

Pathways: Direct discharge via seeps, leaching, bank erosion from tidal action.

Potential Chemicals of Concern: Metals, PCBs

PARCEL 31 [DON OLINE]

MODUTECH MARINE INC. (1983 to present; E)

Yacht construction and boat repair facility; site unpaved.

WASTE GRIT from hydraulic grit blasting of boat hulls spread on roads and unpaved surfaces.

STORM WATER RUNOFF discharges to waterway via Tacoma storm outfall #23 and on-site DRAINAGE SWALE.

1991 - Ecology detected CU (23,000 ppm), CR (128 ppm), ZN (7080 ppm), PB (450 ppm), LPAH (13.2 ppm), HPAH (64.2 ppm), and BIS-2(ETHYLHEXYL)PHTHALATE (20 ppm) in GRIT DEPOSITS NEAR SHORELINE; also detected PCBS (9.2 ppm) in onsite AUTO FLUFF sample; AUTO FLUFF NOT observed in subsequent site investigations.

GRIT excavated and removed from site in 1992 per Ecology order; received NPDES permit for discharging storm water and wash wastewater; plans to pave upland portions of site.

CARL AND ELAINE SWINDAHL (1991 to present; E)

Owner of property.

BABET FUND III (1979 to 1991; E)

Previous owner of property.

DON OLINE (Unknown; E)

Owned property for unspecified time.

STONE INVESTMENTS (1984 to present; E)

Owner of parcel of property adjacent to Modutech Marine; Barton Marine Supplies is current tenant; operates equipment storage and boat yard.

Stored items at facility include: PAINT WASTE, BATTERIES, WASTE OIL, MIXED WOOD WASTE PILES, SCRAP TIRES, DIESEL ENGINES, and PULP MILL SCRAP TANK w/lead lined interior.

STORM WATER RUNOFF from property discharges to TACOMA STORM DRAIN LINE and subsequently to waterway.

1991 - Ecology inspection revealed OIL and SOLVENT spills on gravel surface and WASTE BATTERIES and tires.

SUMMARY

Pathways: Surface water runoff via storm drains and drainage swale, leaching from buried auto fluff

Potential Chemicals of Concern: Metals associated with sandblast grit, PAHs, phthalates, PCBs, phenols? (from wood waste), other semivolatile and volatile organics

PARCEL 32 [BUFFELEN WOODWORKING CO.]

BUFFELEN WOODWORKING CO. (Unknown to 1984; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

DON OLIVE (1984 to unknown; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

STONE INVESTMENTS (Unknown; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

VEHICLE & EQUIPMENT SALVAGE YARD; OPERATION UNKNOWN (Unknown to present; C)

Info not available in Problem Area Status Report.

SUMMARY

Pathways: Unidentified

Potential Chemicals of Concern: Metals, PAHs, other organics associated with salvage operations

PARCEL 33 [NO NAME]

Property known as "Cascade Timber Log Sort Yard #1"

CASCADE POLE & LUMBER CO (1973 to present; E)

Manufactures preservative-treated poles, lumber and other timber products' operated log sort yard until 1977; property inactive since 1981.

CASCADE TIMBER CO (1977 to 1981; E)

RI/FS for site completed in 1990; cleanup scheduled to be completed in July 1993.

Conducted log-rafting and storage operations.

Approx. 1600 tons of ASARCO SLAG used as fill to ballast muddy soils; approx. 2500 to 3000 cubic yards of mixture of SLAG (70 percent), WOOD DEBRIS and dirt present.

SURFACE WATER RUNOFF drains to waterway via two STORM OUTFALLS; has released AS, PB, ZN, and CU; low levels (0 to 5 ppm) detected in 1988 surface water runoff samples.

1990 - RI results indicated AS (1 to 180 ppm) in SOIL borings; METALS and ORGANICS (ND to 20 ppb) in GROUNDWATER.

WOODWORTH & CO (1967 to 1973; D)

Owned property.

SUMMARY

Pathways: Surface water runoff via storm drains/outfalls, leaching of slag

Potential Chemicals of Concern: Metals and organics associated with wood preservatives

PARCEL 34 [SOUND REFINING]

SOUND REFINING CO. (1987 to present; E)

Operates petroleum refinery at which HEAVY CRUDE OIL is refined to PETROLEUM PRODUCTS (ASPHALT, GAS, OIL, KEROSENE, and NAPHTHA); also terminal and blended GASOLINE in onsite tanks.

Sources include: OIL TRANSFER, TANK CLEANING WASTES, PLANT EFFLUENT TREATMENT POND.

Releases include: OIL DISCHARGE from fuel transfer facility; OIL and GREASE NPDES-permitted WASTEWATER DISCHARGE to waterway.

Pathways include: STORMWATER RUNOFF, TREATMENT POND EFFLUENT, WASHING/EROSION of CONTAMINATED SOIL

Ecology order issued to correct NPDES permit violations.

1992 - HEXACHLOROBENZENE, BENZYL ALCOHOL, CU, PHENOL, ZN, AS and PCBS detected in SEDIMENT collected near OUTFALL.

WRIGHT MARINE TOWING INC (1986 to present; D)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

SUMMARY

Pathways: Stormwater runoff via outfall, discharge from treatment pond, erosion of contaminated soils

**** Note **** Ecology concerned about potential groundwater pathway

Potential Chemicals of Concern: Metals, phenols, other organics, PCBs

PARCEL 35 [INTERTIDAL AREA NEAR E. 11TH STREET]

SOUND REFINING CO (1957 to present; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

WRIGHT MARINE TOWING (1986 to unknown; D)

Operates tug moorage, maintenance, and repair facility; does not store fuel here; Problem Area Status Report did not identify any sources or releases of problem chemicals from site.

SUMMARY

Pathways: Undetermined

Potential Chemicals of Concern: Undetermined

PARCEL 36 [NO NAME-SPANS EAST 11TH STREET]

**** Note **** Combined several properties for area for purposes of discussion

4104-4106 EAST 11TH

MINTERCREEK DEVELOPMENT (1983 to present; E)

Owner; property currently occupied by ship repair operation.

Potential sources include: SOLVENTS, METAL SHAVINGS, SPENT SANDBLAST, SHOT & GRIT, WASTE OILS.

Potential contaminants include: TCE, WASTE PAINTS, THINNERS.

SURFACE WATER RUNOFF drains directly to waterway and to 11th Street storm drains.

TACOMA BOAT BUILDING CO. (Unknown to present; E)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

BERNARD COSKI (1968 to 1983; E)

Owned property that at various times housed welding supply company, roofing-related business, machine shop, fiberglass production plant, cement boat building facility.

4102 EAST 11TH

SOUND REFINING CO (1980 to 1984; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

BERNARD COSKI (1968 to 1983; E)

Owned property; at one time housed waterbed manufacturing facility.

PACIFIC MARINE REPAIR (1988 to present; D)

Operates marine equipment repair, salvage and fabrication shop.

Releases include: equipment LEAKING OIL to ground; inadequate storage of OILS and SOLVENTS; SPENT SANDBLAST GRIT dispersed by wind and water.

Pathways include SURFACE WATER RUNOFF and STORM DRAINS to waterway.

4124 EAST 11TH

BARBARA ALLEN (1978 to present; E)

Owner; leased property to boat brokerage companies between 1983 and 1987, and to Banyan Rail between 1988 and 1992.

BANYAN RAIL INC (1988 to 1992; E)

Operated truck and equipment storage yard; site unpaved.

1990 - Ecology observed METAL ORE SLAG, OIL-CONTAMINATED GRAVEL, DRUMS OF WASTE LUBRICATING OILS, and UNLABELED WASTE DRUMS.

STORMWATER RUNOFF discharges via two CATCH BASINS to city of Tacoma Sewer Utility storm drain along East 11th Street and discharge to waterway at Outfall HY-12.

1992 - AS (840 ppm), CD (2.2 ppm), PB (590 ppm) and TPH (11,000 ppm) detected in site SOILS; TPH (3300 ppm) detected in CATCH BASIN SEDIMENT.

4110 EAST 11TH

AIRO SERVICES aka CROWN TANK CLEANING (1978 to present; E)

Current operations include oil recycling; past operations included cleanup of chemical and oil spills, cleaning tanks, transporting haz wastes.

1988 - AIRO issued civil penalty and administrative order to correct violations of state dangerous waste management regulations; although fined, no releases of these or other problem chemicals documented in database.

1980s - stored wastes containing PB (tank bottoms), ETHYLBENZENE, XYLENE, CHLORINATED SOLVENTS in tanks and drums; material observed LEAKING from a tank into secondary storage area in 1990

STORMWATER RUNOFF discharges to waterway via onsite STORM DRAINS discharging to city of Tacoma East 11th Street storm sewer.

DON OLIVE (1974 to present; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

BAY CHEMICAL/ZINC CO./SMELTING CO. (1954 to 1974; E)

Ran a ZINC SULFATE manufacturing operation in 1959 using ZINC SLAG and HCL; reportedly discontinued operations in 1964; manufactured and distributed CALCIUM CHLORIDE from 1962 to 1974; CHROMIUM PLATING plant also reportedly operated onsite.

1959 - Fish kill in waterway allegedly caused by zinc and copper release from facility

1963 - WPCC reported TRUCK WASHINGS, ACIDS and CAUSTICS from chemical trucking firms discharged to two IMPOUNDMENTS; one pond reportedly SEEPING COLORED EFFLUENTS to waterway via drainage ditch; 1961 aerial photos show two surface impoundments filled with black and orange fluid.

2914 MARINE VIEW

HUMANCO METAL PRODUCTS (Unknown to present; C)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

3001 MARINE VIEW

CLARENCE STRACKE (1980 to 1986; D)

Owned upland property; leased to small metal fabrication facility manufacturing steel, aluminum and stainless steel machine parts.

1983 - TPCHD identified METALS, METAL PAINTS and SOLVENTS as potential sources of releases

Property flanked by two SMALL CREEKS that empty into waterway.

4225 EAST 11TH

NORDBERG AUTO BODY (1982 to 1984; D)

Identified as tenant, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

DAVID HUNT (1982 to unknown; C)

Owner; parcel reportedly occupied by auto body shop (see above).

Potential sources: CONTAMINATED SOILS from dumping of WASTE PAINTS and THINNERS to yard; WASTE MATERIALS (e.g. PAINTS, THINNERS, and METALS) washed into waterway during high tides; DIRECT DISCHARGE of PAINTS to STORM DRAIN discharging to waterway; WASTE OIL dumped near "creek".

SUMMARY

Pathways: Everything

Potential Chemicals of Concern: Everything

PARCEL 37 [PUYALLUP TRIBE/MARINA]

MANKE LUMBER CO (1977 to 1978; E)

No info about activities documented in database.

PORT OF TACOMA (Unknown to 1992?; E)

"Inner Hylebos Property"

Initially developed in 1920s; historical operations included saw mill, log towing, boat yards, gas station.

Contaminant sources include: shredded auto interiors; drums & autos buried in peninsula section of property; petroleum spills on land and water; runoff from boat yards.

Primary pathways: STORMWATER RUNOFF discharging from 9 STORM WATER OUTFALLS; GROUNDWATER SEEPS from peninsula.

Problem chemicals detected in waterway include: SB, AS, CU, PB, ZN, NI, CR, TBT, PCBS, PAHS

Problem chemicals detected in peninsula runoff: CD, PB, HG, PCBS, PAHS, XYLENE.

SUMMARY

Pathways: Surface water runoff via overland flow and storm drains, groundwater seeps, direct discharge

Potential Chemicals of Concern: Metals, PAHs, PCBs, TBT, other organics .

PARCEL 38 [OLE & CHARLIE'S]

OLE & CHARLIE'S MARINAS (1975 to present; E)

Operates recreational-boat-related business.

No documentation of sources or releases of problem chemicals from facility.

PORT OF TACOMA (Unknown to 1992; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

SUMMARY

Pathways: Undetermined

Potential Chemicals of Concern: Undetermined

PARCEL 39 [COMMENCEMENT BAY MARINA]

DON OLSON ET AL (1984 to present; E)

Identified as owner, but couldn't locate information in Problem Area Status Report re: contribution, if any, to release of problem chemicals from site.

OLE & CHARLIE'S MARINAS (1975 to present; E)

Operates marina, boat storage, and boat repair business; marina reportedly in operation since 1950.

SURFACE WATER RUNOFF discharges to STORM SEWER, subsequently discharges to waterway via OUTFALL in northwest corner of property.

1991 - Ecology detected AS (65.6 ppm), CU (912 ppm) and ZN (2660 ppm) in ONSITE CATCH BASIN SEDIMENT; problem chemicals also detected in WATERWAY SEDIMENT near property.

SUMMARY

Pathways: Surface water runoff to waterway via storm drains/outfall

Potential Chemicals of Concern: Metals, TBT(?)